

*What is claimed is:*

# CLAIMS

1. A system for accelerating data transfer between networked databases, comprising:

5 a plurality of databases coupled by a network; and

at least one laser unit coupled to each database for communicating data between the databases via free space by way of a laser beam at a rate faster than that which the network is capable.

2. The system as set forth in claim 1, wherein the network includes a router.

10 3. The system as set forth in claim 1, wherein the network is an Ethernet.

4. The system as set forth in claim 1, wherein each laser unit is mounted on the associated database.

5. The system as set forth in claim 4, wherein a plurality of laser units are mounted on each of the databases.

15 6. The system as set forth in claim 4, wherein the laser units move with two degrees of freedom.

7. The system as set forth in claim 1, wherein each laser unit includes a transmitter and a receiver.

20 8. The system as set forth in claim 1, wherein the databases are positioned in a single housing.

9. The system as set forth in claim 8, wherein the housing has a reflective surface positioned therein for reflecting the laser beam between the laser units.

10. The system as set forth in claim 8, wherein the housing has a substantially hemispherical configuration.

5 11. The system as set forth in claim 8, wherein the housing has a substantially spherical configuration.

12. The system as set forth in claim 1, wherein the laser units communicate the data between the databases upon a rate of the communication exceeding a predetermined amount.

13. The system as set forth in claim 12, wherein the laser units communicate the data between the databases upon a rate of the communication exceeding a predetermined amount to a single address in one of the databases.

14. The system as set forth in claim 1, wherein the laser units are movably positioned into alignment prior to communicating.

15 15. The system as set forth in claim 14, wherein the laser units are movably positioned based on a look-up table.

16. The system as set forth in claim 1, wherein the laser beam of the laser units is traced prior to the laser units communicating the data in order to determine whether the laser units are capable of communicating the data.

20 17. The system as set forth in claim 16, wherein an alternate path for the laser beam is determined if the trace is unsuccessful.

18. The system as set forth in claim 16, wherein the data is communicated via the network if the trace is unsuccessful.

19. A method for accelerating data transfer between networked databases, comprising:

coupling a plurality of databases by a network; and

communicating data between the databases via free space using at least one laser unit coupled to each database, wherein the data is communicated by way of a laser beam at a rate  
5 faster than that which the network is capable.

20. The method as set forth in claim 19, wherein the network includes a router.

21. The method as set forth in claim 19, wherein the network is an Ethernet.

22. The method as set forth in claim 19, wherein each laser unit is mounted on the associated database.

23. The method as set forth in claim 22, wherein a plurality of laser units are mounted on each of the databases.

24. The method as set forth in claim 22, wherein the laser units move with two degrees of freedom.

25. The method as set forth in claim 19, wherein each laser unit includes a transmitter  
15 and a receiver.

26. The method as set forth in claim 19, wherein the databases are positioned in a single housing.

27. The method as set forth in claim 26, wherein the housing has a reflective surface positioned therein for reflecting the laser beam between the laser units.

28. An apparatus for accelerating data transfer between networked databases, comprising:

means for coupling a plurality of databases by a network; and

means for communicating data between the databases via free space using at least one laser unit coupled to each database.

Patent 6,660,329